USDA, National Agricultural Statistics Service

Indiana Crop & Weather Report

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USDA, NASS, Indiana Field Office
1435 Win Hentschel Blvd.
Suite 110
West Lafayette, IN 47906-4151
(765) 494-8371
nass-in@nass.usda.gov

CROP REPORT FOR WEEK ENDING SEPTEMBER 18

AGRICULTURAL SUMMARY

Farmers made limited progress harvesting corn and soybeans during the week as they wait for grain moisture to come down to acceptable levels, according to the Indiana Field Office of USDA's National Agricultural Statistics Service. Many farmers were busy preparing equipment and grain storage facilities as they wait for the opportunity to begin harvest in full force. Planting of winter wheat has begun in some counties. Harvest of specialty crops such as tobacco, popcorn, cucumbers, potatoes and tomatoes continued across the state.

FIELD CROPS REPORT

There were 5.8 **days suitable for field work**. Eighty-five percent of the **corn** crop is in the **dent** stage compared with 99 percent last year and 88 percent for the 5-year average. Thirty-six percent of the corn acreage is **mature** compared to 85 percent last year and 47 percent for the 5-year average. Four percent of the corn acreage has been **harvested**, compared to 25 percent last year and 9 percent for the 5-year average. **Corn condition** is rated 34 percent good to excellent compared with 56 percent last year at this time.

Thirty-nine percent of the **soybean** acreage is **shedding leaves** compared to 76 percent last year and 53 percent for the 5-year average. One percent of the soybean acreage has been **harvested** compared with 18 percent last year and 5 percent for the 5-year average. **Soybean condition** is rated 41 percent good to excellent compared with 51 percent last year at this time.

The **third cutting** of **alfalfa hay** is 97 percent complete compared with 100 percent last year and 97 percent for the 5-year average. Sixty-one percent of the **tobacco** crop has been **harvested** compared with 77 percent last year and 56 percent for the 5-year average.

LIVESTOCK, PASTURE AND RANGE REPORT

Pastures benefited from the recent cooler temperatures and precipitation causing **condition** to improve slightly to 12 percent good to excellent compared with 12 percent last year. Continued cooler temperatures brought relief to **livestock.**

CROP PROGRESS

Crop	This Week	Last Week	Last Year	5-Year Avg.
	Percent			
Corn in Dent	85	72	99	88
Corn Mature	36	22	85	47
Corn Harvested	4	1	25	9
Soybeans Shedding Lvs.	39	21	76	53
Soybeans Harvested	1	NA	18	5
Alfalfa, Third Cutting	97	94	100	97
Tobacco Harvested	61	45	77	56

CROP CONDITION

Crop	Very Poor	Poor	Fair	Good	Excel-lent
	Percent				
Corn	8	20	38	30	4
Soybean	7	16	36	36	5
Pasture	20	37	31	11	1

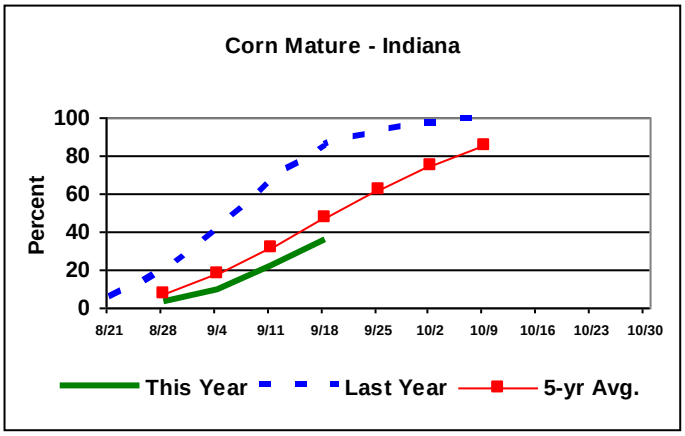
SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK

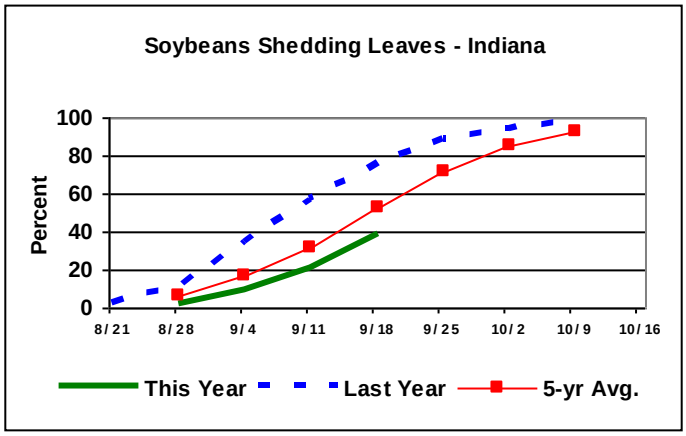
Soil Moisture	This Week	Last Week	Last Year
	Percent		
Topsoil			
Very Short	22	25	44
Short	41	42	40
Adequate	37	32	16
Surplus	0	1	0
Subsoil			
Very Short	28	28	34
Short	42	42	46
Adequate	30	30	20
Surplus	0	0	0
Days Suitable	5.8	5.0	6.7

CONTACT INFORMATION

--Greg Preston, Director
--Andy Higgins, Agricultural Statistician
E-mail Address: nass-in@nass.usda.gov
http://www.nass.usda.gov/Statistics_by_State/Indiana/

Crop Progress





Other Agricultural Comments And News

Delayed Corn Grain Maturity & Frost / Freeze Worries

Written by R.L. (Bob) Nielsen, Agronomy Dept., Purdue University. Article appears in the September 12, 2011 issue of the Corny News Network, and can be found at: http://www.kingcorn.org/news/articles.11/FrostRisk-0912.html

Some forecasters are speculating on the risk of frost or freeze events later this week in the upper Midwest (Andresen, 12 Sep 2011; Dutcher, 9 Sep 2011). While these forecasts suggest the risk lies mainly in areas north of Indiana, growers with late-planted corn that is not yet mature remain concerned about whether their crops will mature before a serious frost or killing fall freeze.

Where does Indiana's corn crop stand at the moment relative to maturity and risk of frost / freeze injury to immature corn? The current USDA-NASS estimates of the kernel development progress of the 2011 Indiana corn crop (Sept 12 report) indicates that 96% of the crop is at the dough stage of development or beyond (Fig. 1), 72% of the crop is at the dent stage of development or beyond (Fig. 2), and only 22% of the crop is physiologically mature (Fig. 3).

Those numbers can be misleading because they represent the percentage of the crop at a given stage **OR BEYOND**. For example, when 72% of the crop is at the dent stage **OR BEYOND** and 22% of the crop is mature, then 50% of the crop is actually in the dent stage of development.

One needs to do similar "reverse" calculations to estimate the actual percentages of the crop that are at specific kernel stages of development. Doing so results in estimates that suggest approximately 4% of the state's corn crop remains in the milk stage of development, approximately 24% of the crop is in the dough stage, and about 50% of the crop is in the dent stage of kernel development.

(continued on page 4)

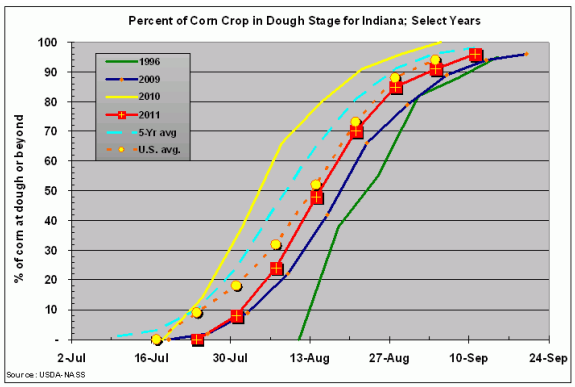


Fig. 1. Percentage of Indiana's corn crop at dough stage OR BEYOND; 11 Sep 2011.
Image 1 of 3 CLOSE

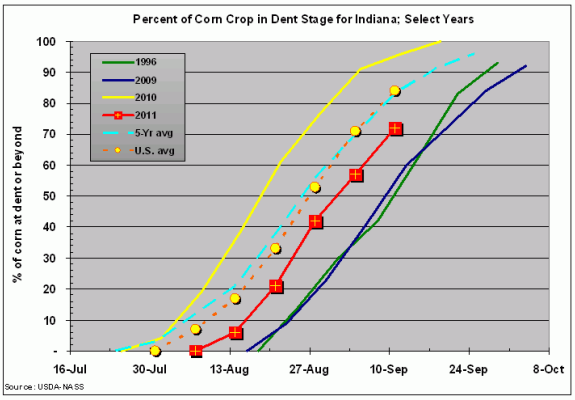


Fig. 2. Percentage of Indiana's corn crop at dent stage OR BEYOND; 11 Sep 2011.
Image 2 of 3 CLOSE

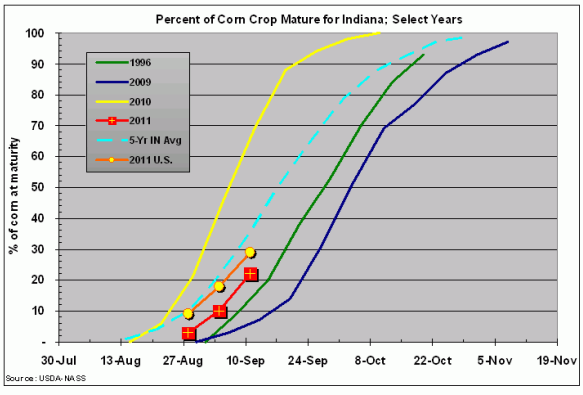


Fig. 3. Percentage of Indiana's corn crop safely mature; 11 Sep 2011.
Image 3 of 3 CLOSE

Weather Information Table

Week Ending Sunday, September 18, 2011

Station	Past Week Weather Summary Data							Accumulation				
								April 1, 2011 through September 18, 2011				
	Air Temperature				Precip.		Avg 4 in Soil	Precipitation			GDD Base 50°F	
	Hi	Lo	Avg	DFN	Total	Days	Temp	Total	DFN	Days	Total	DFN
Northwest (1)												
Chalmers_5W	86	40	60	-7	0.39	2		29.07	+8.03	67	2805	-68
Francesville	85	39	60	-5	0.41	2		26.65	+5.47	69	2798	+156
Valparaiso_AP_I	84	38	60	-6	0.17	1		24.46	+2.02	67	2855	+231
Wanatah	84	33	57	-8	0.21	1	67	29.25	+7.49	84	2495	-14
Winamac	85	40	60	-5	0.35	1		28.34	+7.16	78	2757	+115
North Central (2)												
Plymouth	87	38	59	-7	0.28	1		26.00	+4.51	73	2790	+14
South_Bend	87	39	61	-4	0.20	1		24.65	+3.79	74	2962	+355
Young_America	84	38	60	-6	0.26	1		26.09	+5.67	58	2875	+147
Northeast (3)												
Fort_Wayne	84	40	61	-5	0.21	2		22.48	+3.57	73	3164	+436
Kendallville	83	39	59	-6	0.45	2		28.13	+8.40	96	2803	+239
West Central (4)												
Greencastle	89	40	61	-7	0.34	3		26.67	+2.90	70	2897	-175
Perrysville	88	38	63	-4	0.34	2	73	21.85	-0.60	61	3194	+334
Spencer_Ag	92	41	64	-3	0.29	2		25.31	+1.24	63	3251	+362
Terre_Haute_AFB	92	43	64	-4	0.66	4		25.08	+2.60	67	3399	+349
W_Lafayette_6NW	88	39	62	-4	0.24	1	67	29.06	+8.07	68	3040	+327
Central (5)												
Eagle_Creek_AP	89	43	64	-4	0.24	1		22.90	+1.81	67	3435	+410
Greenfield	89	40	62	-6	0.21	1		29.58	+6.52	82	3188	+281
Indianapolis_AP	92	45	66	-2	0.39	2		20.70	-0.39	63	3598	+573
Indianapolis_SE	88	42	62	-6	0.90	2		28.55	+6.99	71	3116	+100
Tipton_Ag	87	39	61	-4	0.28	1	71	28.88	+7.57	69	2959	+326
East Central (6)												
Farmland	86	38	61	-5	0.25	1	71	23.18	+2.43	74	2986	+414
New_Castle	88	36	60	-5	0.19	1		31.33	+9.23	66	2900	+264
Southwest (7)												
Evansville	92	51	68	-3	0.50	2		34.57	+13.36	55	3934	+430
Freelandville	92	46	67	-2	0.44	2		25.13	+3.02	53	3576	+426
Shoals_8S	92	40	64	-4	0.34	3		31.98	+8.03	57	3328	+273
Stendal	90	46	66	-4	0.48	2		40.56	+16.75	56	3601	+295
Vincennes_5NE	91	47	66	-3	0.61	2	73	34.03	+11.92	59	3625	+475
South Central (8)												
Leavenworth	89	47	66	-2	0.54	3		33.38	+9.07	74	3581	+546
Oolitic	88	43	63	-5	0.33	4	69	35.81	+12.85	70	3190	+270
Tell_City	91	51	68	-3	0.35	1		33.63	+9.25	58	3760	+382
Southeast (9)												
Brookville	89	40	63	-4	0.20	2		28.46	+6.17	73	3324	+550
Greensburg	89	43	64	-4	0.40	2		31.47	+8.99	64	3390	+557
Seymour	86	45	62	-5	0.33	2		30.77	+8.87	60	3194	+281

DFN = Departure From Normal.
GDD = Growing Degree Days.
Precipitation (Rainfall or melted snow/ice) in inches.
Precipitation Days = Days with precip of .01 inch or more.
Air Temperatures in Degrees Fahrenheit.

For more weather information, visit www.awis.com or call 1-888-798-9955.

An earlier article of mine offered some guidelines to help growers estimate maturity dates for corn based on current stages of kernel development (Nielsen, 2011). Those estimates are summarized in Table 1, along with estimates of possible yield losses if immature fields were damaged or killed by frost / freeze events (Carter & Hesterman, 1990). The difference between the estimates of yield losses in the last two columns of the table is based on whether the plant is completely killed or whether there is opportunity for surviving stalk tissue to remobilize stored carbohydrates to the immature grain before kernel black layer occurs.

Given the estimated percentage of the state's corn crop yet in the dent stage of development or younger, the significance of an early-occurring fall frost or freeze event in the next few weeks should not be underestimated.

Keep your fingers crossed!

Table 1. Kernel developmental stages and estimates of yield loss if damaged by frost or freeze prior to maturity.

Kernel stage	% of Indiana crop (11 Sep 2011)	Approx. days to maturity (1)	Est. yield loss if... Only leaves killed (2)	Death of whole plant (2)
Milk (R3)	~ 4%	44 - 51	> 35%	> 60%
Dough (R4)	~ 24%	35 - 40	~ 35%	~ 55%
Dent (R5)	~ 50%	19 - 24	~ 27%	~ 41%
Half-milkline	??	10 - 14	~ 5%	~12%
Mature (R6)	~ 22%	0	0%	0%

R3 = White or yellow kernels w/ milky fluid

R4 = Dough, no visible denting

R5 = Dent, all kernels visibly dented

Half-milkline = Kernel milkline halfway between crown & tip

R6 = Kernel black layer

(1) Nielsen, 2011; (2) Carter & Hesterman, 1990.

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USDA, NASS, INDIANA FIELD OFFICE
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